Endpoint	Placebo N=1332	GP IIb/IIIa N=1834	P
30-Day Death	5.1%	5.1%	0.965
30-Day MI	23.3%	19.7%	0.017
30-Day Death/MI	26.0%	22.8%	0.035
6-Month Death	7.0%	7.1%	0.915
6-Month MI	27.4%	23.7%	0.037
6-Month Death/MI	31.2%	27.0%	0.023

1074-97 **Troponin T Elevation Following Cardiac Surgery Is Associated With Increased One-Year Mortality and Morbidity**

Sekar Kathiresan, John B. Newell, Stephen J. Servoss, Dawn Trani, Thomas E. MacGillivray, Kent Lewandrowski, Elizabeth L. Lewandrowski, James L. Januzzi, Jr., Massachusetts General Hospital, Boston, MA

Background: Serum Troponin T (TnT) elevation after cardiac surgery predicts impending in-hospital complications. Whether cardiac TnT predicts medium-term outcomes after cardiac surgery remains undefined. **Methods:** In a prognostic study of 224 patients undergoing cardiac surgery, serial blood sampling of TnT was performed at three time intervals: immediate postoperative, 6-12 hours, and 18-24 hours. One-year follow-up for adverse events including recurrent ischemia (RI), congestive heart failure (CHF) and death was obtained in 97.3% of the patients. TnT levels were log-transformed, and divided into quintiles for analysis. Clinical variables including baseline demographics, as well as both creatine kinase MB isoenzyme (CK-MB) and TnT levels, were assessed with Cox-proportional hazards modeling to identify independent predictors of one-year outcomes. **Results:** A TnT level in the highest log quintile (>1.58 ng/ml) following cardiac surgery was the strongest predictor of cardiac complications at one-year, identifying patients at high risk for RI, CHF, and mortality, as well as composites of these endpoints (see Table 1). In the presence of TnT, the results of CK-MB testing added no significant independent prognostic information. **Conclusions:** Assessment of TnT after cardiac surgery may identify patients with a considerably increased risk for morbidity and mortality during the first year after heart surgery.

Risk For One Year Adverse Outcomes Per Log Quintile TnT

Endpoint	Odds Ratio	95% CI	P value
CHF (n=12)	33.0	8.2-130.0	<0.00005
RI (n=18)	3.3	1.2-9.1	0.012
Death (n=15)	39.0	13.2-114.0	<0.00005
CHF/RI (n=26)	6.6	2.3-18.5	0.0004
Death/RI (n=26)	6.4	2.4-17.5	0.0003
Death/RI/CHF (n=34)	5.6	2.3-13.7	0.0001

1074-98 **Influence of Depression on Disease Specific Functional Status Recovery Following Coronary Bypass Surgery**

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Background: Depression is known to influence clinical outcome in patients with CAD. Little information is available on role of depression in recovery of disease specific functional status after CABG. **Methods:** This study prospectively tracked 224 patients' functional status at baseline and at monthly intervals for 6 months following CABG. The Seattle Angina Questionnaire (SAQ) was used to assess angina frequency (AF), physical limitation (PL) due to angina, and disease specific quality of life (QOL). SAQ scores range 0-100 where higher scores indicate better functioning. Baseline depression was assessed using the Mental Health Index-5. **Results:**
Baseline variables (Age, gender distribution, EF, prior MI, prior revascularization, smoking, COPD, HTN, CHF, education, marital status, % living alone, and household income) were similar in the two groups. Depressed patients (n = 14) were more likely to have renal insufficiency (20% vs. 8%; p= .02), stroke (27% vs. 8%; p= .04), DM (53% vs. 27%; p= .04) and reported more economical strain (73% vs. 44% (p= .001). Prior to CABG, depressed patients had more frequent angina (mean SAQ score 51± 26 vs. 67 ± 26 for non-depressed; p= .03) and were more physically limited compared to non-depressed patients (mean SAQ score 46 ± 29 vs 66 ± 25; p= .006). Six months after CABG depressed patients had substantial improvement in angina frequency and physical limitation from angina, to a level comparable to non-depressed patients (mean SAQ AF score 93 ± 14 vs 93 ± 12; p= .96, and mean SAQ PL score = 72 ± 23 vs 78 ± 22; p= .54). QOL was similar in both groups at baseline (mean SAQ score= 47 ± 29 for depressed and 54 ± 22 for non-depressed; p= .39), and improved similarly in both depressed and non-depressed patients (6 months mean SAQ score 84 ± 18 vs. 84 ± 17; p= .89). **Conclusion:** Although at presentation for CABG, depressed patients have more frequent angina and are more physically limited compared to non-depressed patients, 6 months following CABG they achieve substantial benefit to a level comparable to non-depressed patients. Baseline QOL limitation from angina and improvement following CABG are also similar in both groups.

1074-99 **Physician-Prescribing Patterns Among Patients Undergoing Coronary Artery Bypass Graft Surgery: Results From the ROSETTA-CABG Registry**

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Background: Guideline statements have provided recommendations on appropriate medical therapy for patients with CAD and specific co-morbid conditions. Little is known on whether these recommendations are being followed in clinical practice in patients undergoing coronary artery bypass graft (CABG) surgery. **Methods:** We examined the rates of medical therapy among 255 patients who were enrolled in the Routine versus Selective Exercise Treadmill Testing After CABG (ROSETTA-CABG) Study, a prospective multicenter study examining the use of functional testing after CABG at 12 clinical centers in 4 countries. **Results:** At discharge and 12-months, rates of aspirin were 92% and 86%. Anti-lipid treatment was low at discharge (56%) but increased by 12-months (78%). β-blocker use was high at discharge (72%) but decreased by 12-months (65%). Rates of calcium antagonist use were low at both discharge and 12-months (19%,19%). Rates of ACE inhibitors remained stable from discharge to 12-months (30% to 38%). Rates of these medications among subgroups can be found in Table 1. **Conclusion:** Although physicians appear to be following guidelines regarding aspirin use, anti-lipid agents and ACE inhibitors are under prescribed among patients known to benefit from them. Moreover, anti-ischemic medications are over prescribed among patients with no recurrent ischemia or indication for their use.

Rates of Medical Therapy Among Subset of Patients post-CABG (N=255).

	Discharge (%)	12-months (%)
Aspirin		
Prior MI or Stable Angina	89	88
Anti-Lipids		
Prior MI	55	81
Beta-Blockers		
Prior MI, CHF or Hypertension	75	67
Neither	64	56
Calcium Antagonists		
Stable Angina	18	24
No Stable Angina	19	19
ACE inhibitors		
Prior MI	39	47
CHF	56	68
Diabetes	44	49

ORAL CONTRIBUTIONS

810 Understanding Risk Among Patients With Acute Coronary Disease

Monday, March 31, 2003, 9:15 a.m.-10:30 a.m.
McCormick Place, Room S104

9:15 a.m.

810-1 **Neovascularization Is the Most Powerful Independent Predictor for Progression to Disruption in High-Risk Atherosclerotic Plaques**

K-Raman Purushothaman, Valentin Fuster, William N. O'Connor, Pedro R. Moreno, University of Kentucky, Lexington, KY

Background: High-risk lesions AHA type IV-Va may progress to disruption or regress to fibro-calcific lesions AHA Vb-Vc. Inflammation, fibrous cap thickness (FCT) and lipid area are critical determinants of progression. Furthermore, neovessels (NV) nourish the plaque and may play a role in plaque instability. This study quantified inflammation, FCT, lipid area, and plaque NV in high-risk, fibro-calcific and disrupted plaques, and compared their statistical power to predict plaque disruption.
Methods: Studies were performed on 262 human autopsy aortic plaques. Plaque Inflammation, defined as ≥25 round mononuclear cells per high power field was quantified by light microscopy. Lipid area, defined by needle-shaped cholesterol clefts was quantified by computerized planimetry. FCT was quantified by ocular micrometry. NV, defined as tubululuminal CD-34 positive capillaries were quantified within the fibrous cap and at the base of the plaque by manual counting on immunostained sections.
Results: Inflammation, lipid area and NV content were increased in high-risk and disrupted plaques (Table). NV at the base of the plaque provided the strongest independent predictor for plaque disruption (Table).
Conclusion: High-risk and disrupted plaques have increased NV in comparison to fibro-